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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,401	03/22/2001	Mark D. Einziger	1932/0H835	3826
7590 10/01/2004				
Stephen B Shear Church & Dwight Co Inc 469 North Harrison Street Princeton, NJ 08543-5297				
EXAMINER BERKO, RETFORD O				
ART UNIT		PAPER NUMBER		
1615				

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/814,401

Applicant(s)

EINZIGER ET AL.

Examiner

Retford Berko

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-16 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-16 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Acknowledgement: The Request for Continued Examination and the Preliminary Amendment filed January 15, 2004 is acknowledged.

Status of Claims

Claims 3-16 and claims 23-25 are pending in the RCE file and in view of applicant's amendment.

Claims 1-2, and 17-22 have been cancelled in view of applicant's amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim in that the claim is drawn to a slurry comprising spherical alkali metal bicarbonate particles having a IR spectra "as shown in Fig. 1".

Claim 12 is further rejected under 35 USC 112, second paragraph because examiner is interpreting the claim language by applicant "spectra shown in Fig. 1" to mean that applicant is using the claim language "such as in Fig 1"---the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claims 3 and 24 are rejected under 35 USC 112, second paragraph, as being indefinite in that the claims fail to point out what is included or excluded by the claim language. The claims are omnibus type claims because in claim 3, applicant states that the "slurry is stable and is

prepared in the absence of a suspending aid” but in claim 24, applicant indicates that the product comprising the slurry also comprises of fragrances, colorants and suspending agents----a contradiction; thus making the claims indefinite. The issue is whether the slurry comprises suspending aids because water, alcohol and glycols are considered as suspending aids.

Applicant is advised to clarify the claim language and make the claims definite explaining whether or not the slurry comprises of suspending agents (claims 3 and 24) and also by removing the indefinite claim language “shown in Fig. 1” (claim 12).

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 3-13 and 23-25 are rejected under 35 U.S.C. under 35 U.S.C. 103(a) as being unpatentable over Cheng et al (US 4, 414, 130).

Independent claim 3 is drawn toward a slurry comprising spherical alkali metal bicarbonate particles (particle size equal to 0.2-50 microns, surface area of 140 units) dispersed in a liquid medium, the slurry having bulk density (1.4-1.6 units, Zeta potential of 2-11 mV); and the slurry is stable and is prepared in the absence of a suspending aid. The dependent claims (claims 4-13) are drawn toward proportions and particle size of the alkali metal bicarbonate in the slurry and the inclusion of other ingredients in the slurry (e.g. fragrances, colorants and glycols). The claims are further drawn toward incorporation of the slurry in products (e.g. detergent, chewing gum).

Chen et al (Patent '130) disclose an improved particulate detergent composition comprising sodium bicarbonate particles and other alkali metal salts in the form of a slurry (abstract, col 5, lin 45-54; col 7, lin 20-35; col 12, lin 1-15; col 16, lin 26-35 and col 23, lin 20-50). According to Chen, the limitations in the instant claims are met in that the slurry comprises particles that are spherical (abstract), comprise sodium bicarbonate particles (col 7, lin 34), the particles have size of approx. 0.01-15 microns (col 4, lin 40-50 and col 16, lin 26-35). Patent '130 further discloses that the slurry composition also comprises of primary alcohol, fatty alcohol or glycol (col 8, lin 1-10 and col 10, lin 32-50) is a detergent (col 9, lin 56), is stable

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(col13, lin 15-20) and further comprises of other ingredients (e.g. colorant, bactericide etc; col 20, lin 25-30).

One of ordinary skill in the art would be motivated to make a slurry composition comprising alkali metal bicarbonate particles having sizes as that in the instant claims and further comprising additional ingredients (e.g. perfumes, flow improving agents). One of ordinary skill would expect to obtain detergent product having desirable aroma or appearance that can contrast with that of other detergents that have the same appearance (col 14, lin 60-65). Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill at the time that it was made.

Claim 3-13; 23-25 and 14-16 are rejected under 35 U.S.C. under 35 U.S.C. 103(a) as being unpatentable over Cheng et al (US 4, 414, 130) in view of Lajoie (US 5, 411, 750) and further in view of Itob et al (US 5, 071, 558).

Independent claim 3 is drawn toward a slurry comprising spherical alkali metal bicarbonate particles (particle size equal to 0.2-50 microns, surface area of 140 units) dispersed in a liquid medium, the slurry having bulk density (1.4-1.6 units, Zeta potential of 2-11 mV); and the slurry is stable and is prepared in the absence of a suspending aid. The dependent claims (claims 4-13 and 23-25) are drawn toward proportions and particle size of the alkali metal bicarbonate in the slurry and the inclusion of other ingredients in the slurry (e.g. fragrances, colorants and glycols). Claims 14-16 are drawn toward a method of using the slurry by incorporating the slurry in products (e.g. detergent, chewing gum, dialysate, toothpaste or household cleanser or deodorant).

The disclosures of Cheng et al (Patent '130) are discussed.

Patent '130 does not disclose liquid medium or bulk density, does not disclose incorporating the slurry in products such as dialysate or deodorant.

Lajoie et al (Patent '750) disclose alkali metal powder consisting of sodium bicarbonate or potassium bicarbonate particles or a mixture thereof having particle size of 4-12 microns (col 2, lin 30-35). Patent '750 discloses the liquid medium in which the powder can be suspended and have long term stability (col 3, lin 25-29; col 4, lin 1-5 and col 4, example III) and also the bulk density is disclosed (col 6, lin 50-55). Further, Patent '750 discloses incorporation of the particles in deodorant composition (col 4, example III).

Itob et al (Patent '558) disclose a dialysate comprising sodium bicarbonate particles having particle size of at most 250 microns (col 9, lin 45-50) and water content of 0.5-25% by weight (ccol 10, lin 10).

One of ordinary skill in the art would be motivated to make a slurry composition comprising alkali metal bicarbonate particles having sizes as that in the instant claims and further comprising additional ingredients (e.g. perfumes, flow improving agents). One of ordinary skill would expect to obtain detergent product having desirable aroma or appearance that can contrast with that of other detergents that have the same appearance (col 14, lin 60-65). Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill at the time that it was made.

The following prior art is cited for the record only and was not relied upon in the current claim rejections:

Sugahara et al (US 4, 238, 346). The reference discloses improved aqueous dispersion of alkaline earth metal bicarbonates (col 26, lin 55; col 58, lin 10-20), forming a detergent

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composition (col 57, lin 25) as a slurry (col 28, lin 20-45 and col 35, example 3). Paten '346 also discloses many of the limitations in the instant claims such as particle size (col 3, lin 25-59), Zeta potential (col 9, lin 30-35) and bulk density 9col 14, lin 50-55). The reference is not being applied because the reference does not mention that the particles in the slurry are spherical.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Retford Berko** whose telephone number is 703-305-4442. The examiner can normally be reached on M-F from 8.00 am to 5.30 pm

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Thurman K Page**, can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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